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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,152	07/25/2006	Walter Stieglbauer	STIEGLBAUER ET AL 6 PCT	4971
25889	7590	11/25/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			DANG, KET D	
			ART UNIT	PAPER NUMBER
			3742	
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			11/25/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/587,152

## Applicant(s)

STIEGLBAUER ET AL.

## Examiner

KET D. DANG

## Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 42, 44-62 and 64-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42, 44-62 and 64-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 25 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/22/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **93DETAILED ACTION**

This office action is responsive to the amendment filed on July 22, 2009. As directed by the amendment: claims 42, 44-62, and 64-80 have been amended, claims 41, 43 and 63 have been cancelled and claims 81-88 have been added. Thus, claims 42, 44-62, and 64-88 are presently pending in this application.

#### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in Austria Parent Application No. A 103/2004, filed on January 27, 2004.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 50 and 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Regarding claims 50 and 70, the phrase "a rotationally fast manner" renders the claim indefinite because it is unclear how fast would be considered "fast" manner thereby rendering the scope of the claim(s) unascertainable.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 45-49, 52-54, 56-58, 60-62, 65-69, 72-74, 76-78, 80, 81, 83, & 86-87 are rejected under 35 U.S.C. 102(b) as being anticipated by Berger (GB 2016984 A).

7. Regarding claim 81, Berger discloses a wire feed device for transporting a welding wire from a wire storage to a point of consumption comprising (abstract): (a) a plurality of guiding elements 5 (Fig. 1) for guiding the welding wire 3 (Fig.1), each guiding element including a guide path along which a plurality of transport elements 2 (Fig. 1) are displaceably mounted; a base body (see figure 3 below); and a drive sleeve 7 (Fig. 1) connected with at least one transport element of each guiding element; wherein at least one further transport element 2 (Fig. 1) is connected with the welding wire 3 (Fig.1) in at least one of a force- locking manner and a form-locking manner (Page 1, lines 84-86) (Page 2, lines 100-107); wherein the base body (see figure 3 below) and the guiding elements 5 (Fig. 1) are arranged in the drive sleeve 7 (Fig. 1); and wherein at least one guiding element 5 (Fig. 1) is displaceably arranged to adapt to a diameter of the welding wire (Abstract recites "the diameter of a wire nozzle bore is automatically adjusted along with roller adjustment").

8. Regarding claim 45-49, 52-54, 56-58, and 60, Berger discloses a wire feed device, wherein the base body centrally (Page 1, lines 16-20) arranged in the drive sleeve 7 (Fig. 1); wherein the drive sleeve is formed with an internal thread adapted to the contour of the transport element 2 (Fig.1) and engaged by at least one transport element; wherein each of the internal thread of the drive sleeve, the base body (see figure below) and the guiding element conically designed 10 (Fig. 1) (Page 4, lines 28-

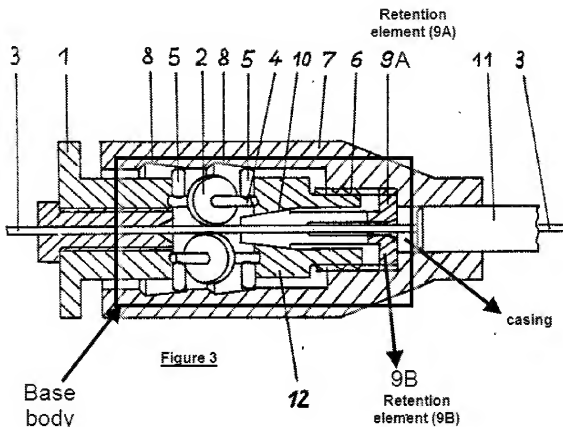
39); wherein the base body comprises a preferably cylindrical projection (Page 2, lines 10-14), wherein the cylindrical projection is mounted in the interior of the drive sleeve; wherein the base body, on its side located opposite the projection, comprises a rectangularly designed positioning flange 1 (Fig. 2); wherein the coupling element is directly connected with a drive, in particular electromotor (Page 4, lines 40-42); wherein the drive is arranged axially to the wire feed device (Page 3, lines 94-100); wherein the drive comprises a hollow shaft 11 (Fig. 11) (Page 4, lines 94-99), wherein the hollow shaft is connected with the coupling element wherein the welding wire 3 (fig. 1) is passable through the hollow shaft 11 (Fig. 11) to the wire feed device (abstract); wherein a pressure element is arranged in the base body so as to be positioned between the positioning flange (Page 2, lines 100-107) and the guiding element 5 (Fig. 1) and to exert a pressure force onto the guiding elements (Page 1, lines 79-89); wherein each guiding element 5 (Fig. 1) comprises a guide groove 8 (Fig. 1), and at least one guide pin is arranged on the base body to engage said guide groove of the guiding element (Page 1, lines 79-84); wherein each transport element is designed in the form of a ball (Page 3, lines 49-56); and wherein the wire feed device is arranged in at least one of a welding apparatus (Page 1, lines 14-15).

9. Regarding claim 61, Berger discloses a method for feeding a welding wire 3 (Fig. 10 from a wire storage to a point of consumption, wherein a plurality of guiding elements 5 (Fig. 1) for guiding the welding wire 3 (fig. 1) are arranged in a base body (see figure 3 below), each guiding element including a guide path along which a plurality of transport elements 2 (Fig. 1) are displaceably mounted, wherein the guiding

elements 5 (Fig. 1) and the base body are arranged in a drive sleeve 7 (Fig. 1) to form a drive mechanism connected with at least one transport element 2 (Fig. 1) of each guiding element 5 (Fig. 1), wherein the welding wire is guided through at least one element 2 (Fig. 1), wherein at least one transport element 2 (Fig.1) is in operative connection with the welding wire on a side of the respective guiding element facing the welding wire 3 (Fig. 1), and on at least one further side of the guiding element 5 (Fig. 1, the bottom side), at least one further transport element is displaced by the drive mechanism 7 (Fig. 1), thus causing the transport elements 2 (Fig. 1) arranged in the guide path to be moved on by said at least one further transport element displaced by the drive mechanism 7 (Fig. 1), and wherein at least one guiding element is displaced for adaptation to the diameter of the welding wire (Abstract recites "the diameter of a wire nozzle bore is automatically adjusted along with roller adjustment").

10. Regarding claims 62, 65-69, 72-74, 76-78, 80, and 84, Berger discloses a method for feeding a welding wire 3 (fig. 1), wherein each guiding element 5 (Fig. 1) is displaced in the base body in at least one of a longitudinal and a vertical direction (Page 3, lines 103-109); wherein the base body is centrically (Page 1, lines 16-20) arranged in the drive sleeve 7 (Fig. 1); wherein at least one transport element engages a thread of the drive sleeve, with a contour of the thread being adapted to a contour of the transport element (Page 1, lines 79-84); wherein each of the thread of the drive sleeve, the base body and the guiding elements is conically designed 10 (Fig. 1) (Page 4, lines 28-39); wherein the base body (see figure 3 below) comprises a cylindrical projection (Page 2, lines 10-14), the base body being mounted in the interior of the

drive sleeve 7 (Fig. 1) via the cylindrical projection (Page 2, lines 10-14); wherein the base body, on its side located opposite the projection, comprises a rectangularly designed positioning flange 1 (Fig. 2); wherein the drive sleeve is directly connected with the drive is electromotor (Page 4, lines 40-42); wherein the drive is arranged axially to the wire feed device (Page 3, lines 94-100); wherein the drive is connected with the coupling element via a hollow shaft 11 (Fig. 11) arranged in the drive (Page 4, lines 94-99), welding wire being fed through hollow shaft (Page 4, lines 40-42); wherein a pressure force is exerted on the guiding element by a pressure element arranged in the base body between the positioning flange (Page 2, lines 100-107) and the guiding element (Page 1, lines 79-89); wherein at least one guide pin arranged on the base body engages a guide groove 8 (Fig. 1) of the guiding element (Page 2, lines 65-71) and the guiding element is displaced via assembly (Page 1, lines 9-11); wherein the transport element is designed in the form of a ball (Page 3, lines 49-56); and wherein the wire feed device (Abstract) is arranged in a welding torch and a welding apparatus (Page 1, lines 14-15).



**Claim Rejections - 35 USC § 103**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 42, 50-51, 55, 59, 70-71, 75, 79, 85, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger (GB 2016984 A).



13. Regarding claims 42, 50-51, 55, 59, 70-71, 75, 79, 85, and 88, Berger discloses the claimed invention, except for at least one guiding element is displaceably arranged in the base body; the positioning flange is connected with a retention element in a rotationally fast manner; wherein the drive sleeve is connected with a coupling element, coupling element being arranged on the opposite side of the retention element; wherein the drive is rotationally connected with a further retention element; wherein the drive sleeve has an outer diameter of between 20 mm and 30 mm. However, Berger teaches wherein at least one guiding element is displaceably arranged in a base body (See "Base body" in figure 3 enclosed above); the positioning flange is connected with a retention element in a rotationally fast manner 9A (See Figure 3 enclosed above); wherein the drive sleeve is connected with a coupling element, coupling element being arranged on the opposite side of the retention element 9B (See Figure 3 enclosed above); wherein the drive is rotationally connected with a further retention element (See Figure 3 for retention elements); wherein the drive sleeve has an outer diameter of between 20 mm and 30 mm (Abstract, variable diameter). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Berger's reference, to include the above features. Berger was not adequately labeling those features on the figures and also his invention is capable of adapting them as well.
14. Claims 44, 64, & 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger (GB 2016984 A) in view of Sugiyama (GB 2174942 A).

15. Regarding Claims 44, 64, & 82, Berger discloses the claimed invention, except for wherein three guiding elements are arranged about the welding wire; wherein three guiding elements offset by  $120^{\circ}$ , are arranged in the base body; and wherein three guiding elements are offset by an angle of  $120^{\circ}$ . However, Sugiyama discloses wherein three guiding elements 19a/19b/19c (Fig. 2) (Page 1, lines 61-66) are arranged about the welding wire; wherein three guiding elements offset by  $120^{\circ}$ , are arranged in the base body; and wherein three guiding elements are offset by an angle of  $120^{\circ}$  (See figure 2 for three guiding elements arrangement is illustrated a  $120^{\circ}$  apart). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Berger's reference, to include three guiding elements are offset by an angle of  $120^{\circ}$ , as suggested and taught by Sugiyama, for the purpose of providing a better device structure of transporting welding wire.

#### ***Response to Amendments/Arguments***

16. Applicant's amendments have overcome claim 44 objection and 35 U.S.C. 112 2<sup>nd</sup> paragraph rejections of claims 55 and 75 from the first non-final Office Action. The claim 44 objection was from applicant's application publication. Examiner is withdrawn this objection.

Applicant's arguments with respect to claims 41-80 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D DANG/  
Examiner, Art Unit 3742  
November 21, 2009  
/TU B HOANG/

Supervisory Patent Examiner, Art Unit 3742